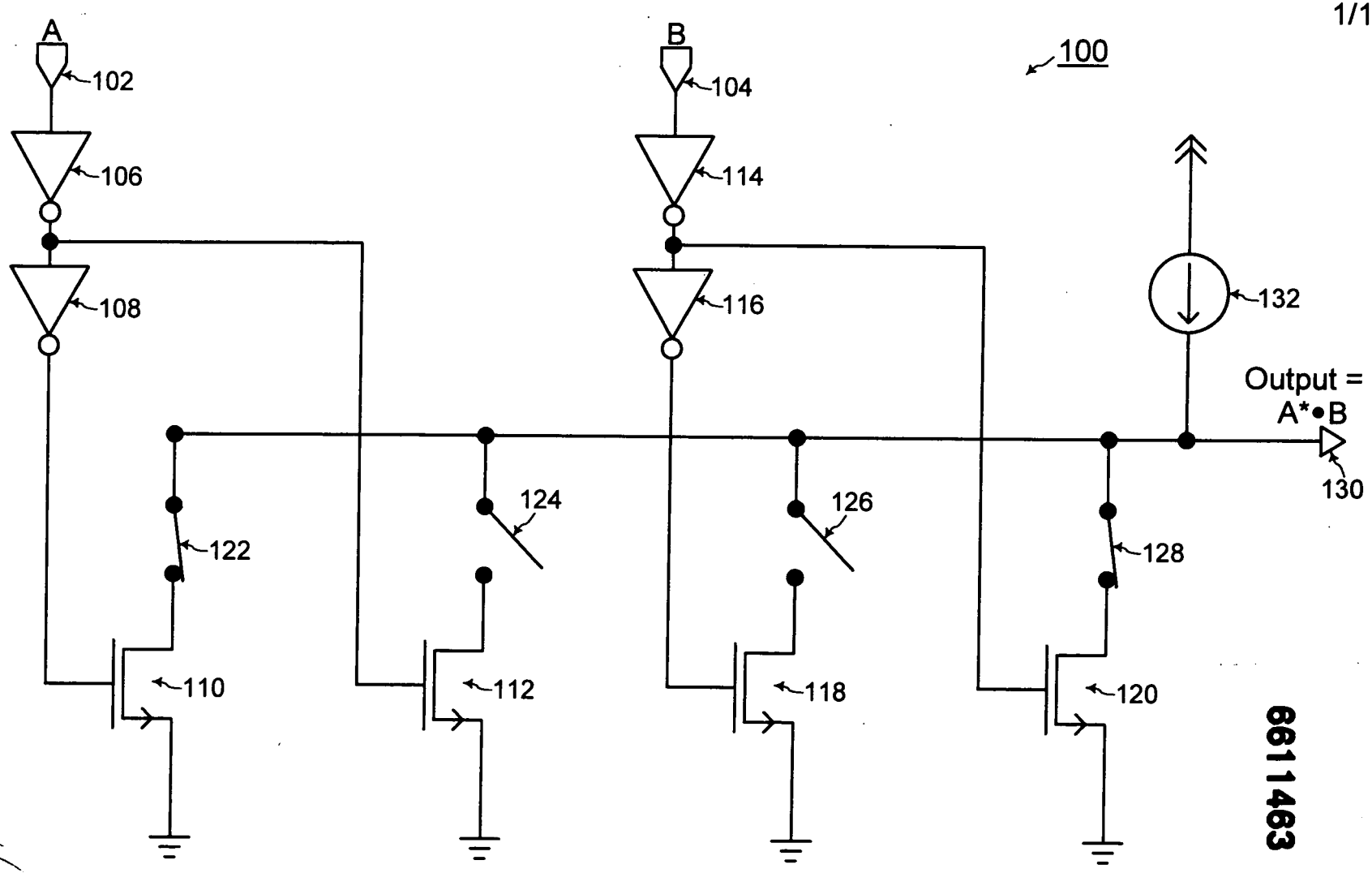


FIG. 1 (Prior Art)

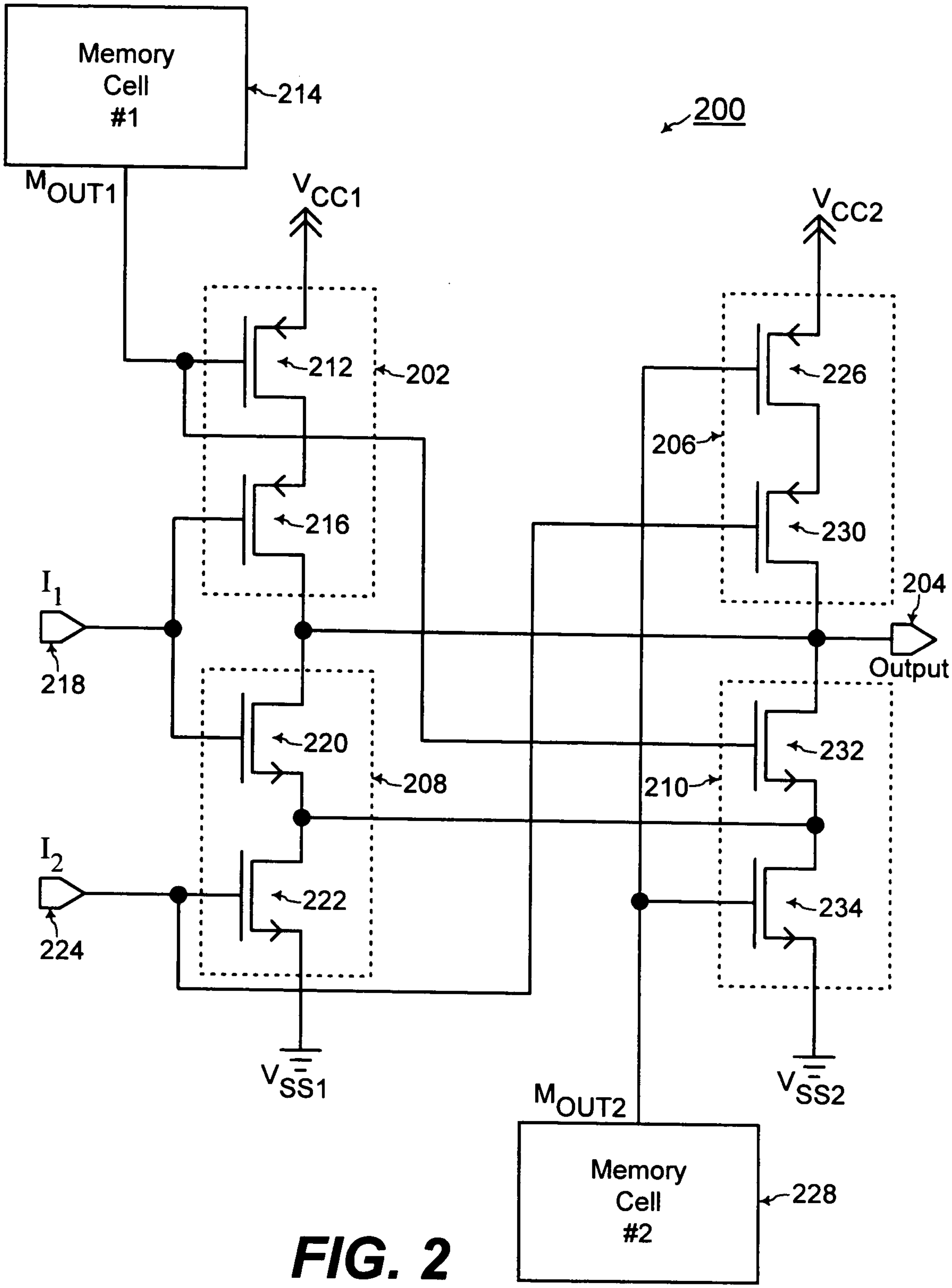


FIG. 2

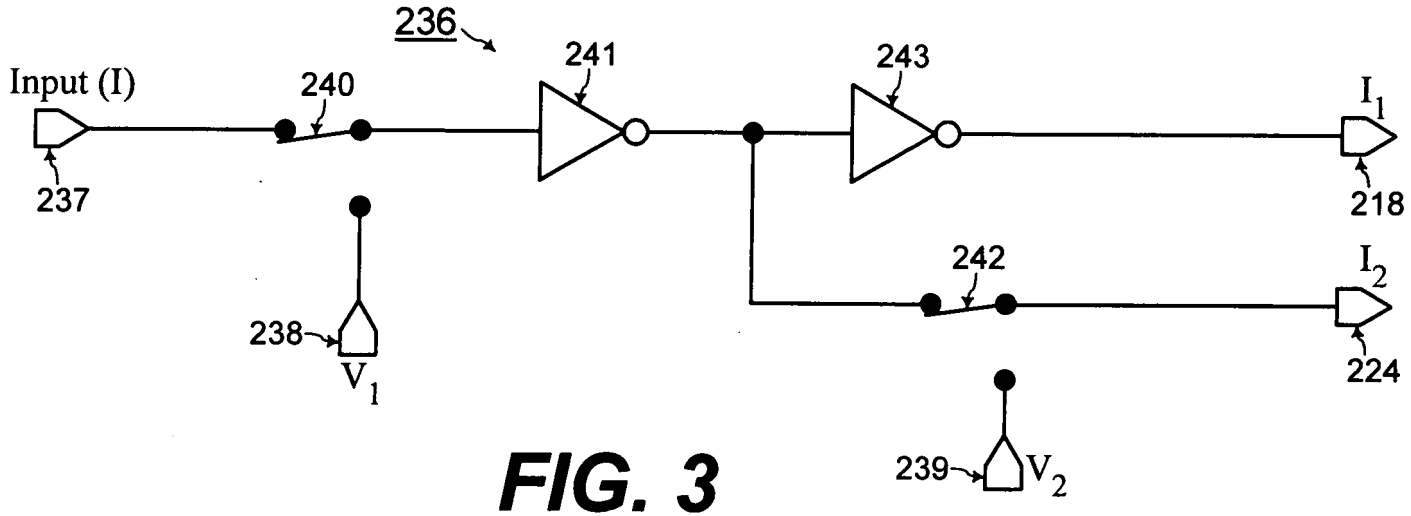

236
Input (I)
240
241
243
I_1
237
218
242
I_2
238
V_1
224
239
V_2

FIG. 3

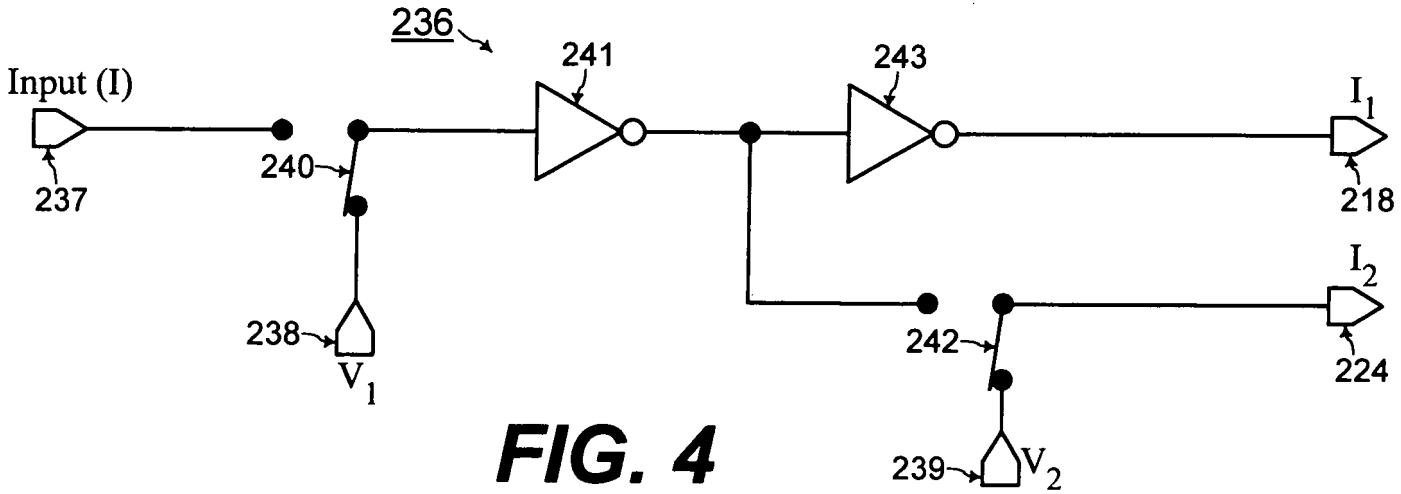

236
Input (I)
241
243
I_1
237
240
218
I_2
238
242
V_1
224
239
V_2

FIG. 4

I_1	I_2	M_{OUT1}	M_{OUT2}	Output
0	0	0	0	1
0	0	0	1	1
0	0	1	0	1
0	0	1	1	0
0	1	0	0	1
0	1	0	1	1
0	1	1	0	0
0	1	1	1	0
1	0	0	0	1
1	0	0	1	0
1	0	1	0	1
1	0	1	1	0
1	1	0	0	0
1	1	0	1	0
1	1	1	0	0
1	1	1	1	0

244

251

FIG. 5

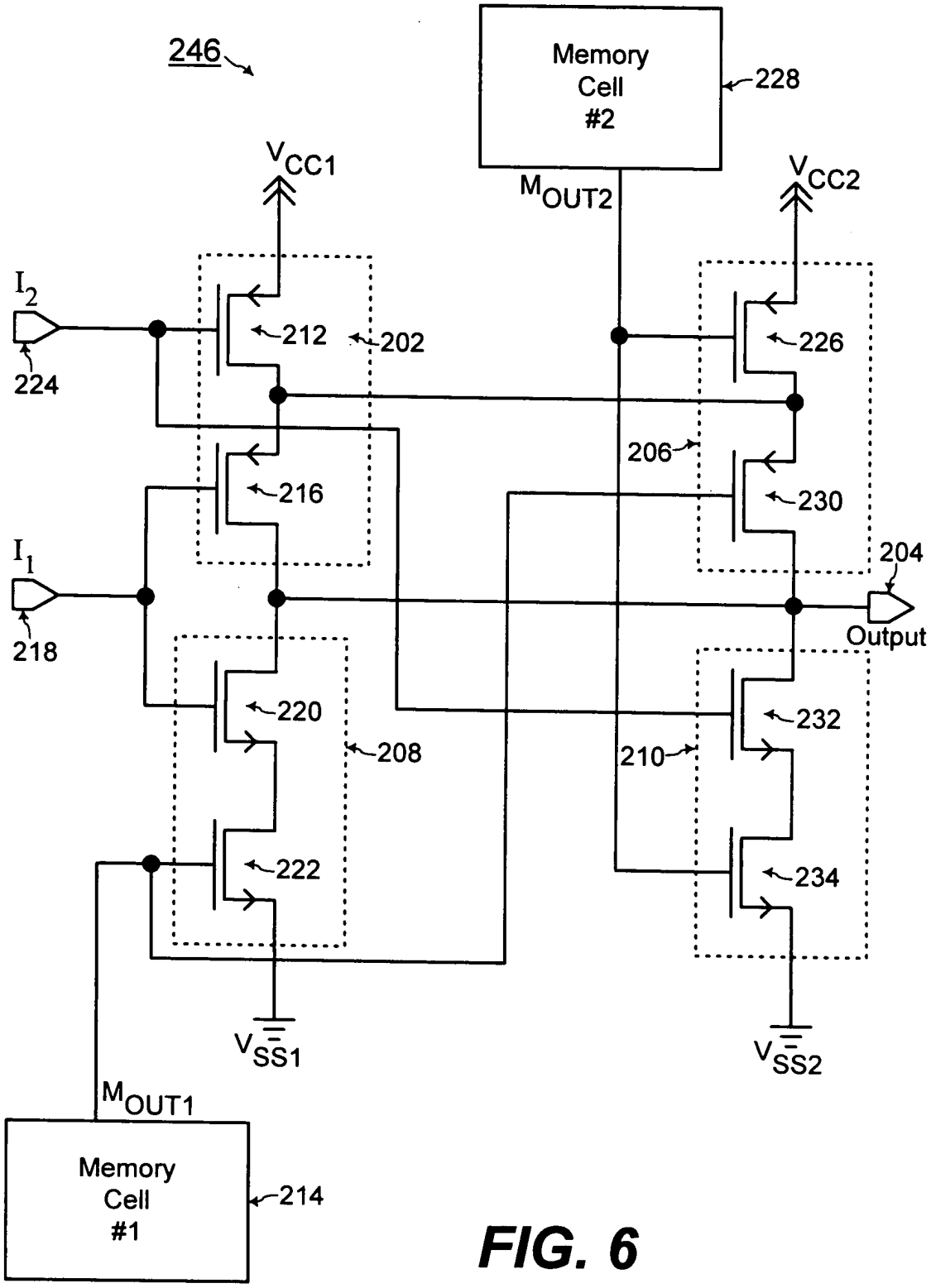
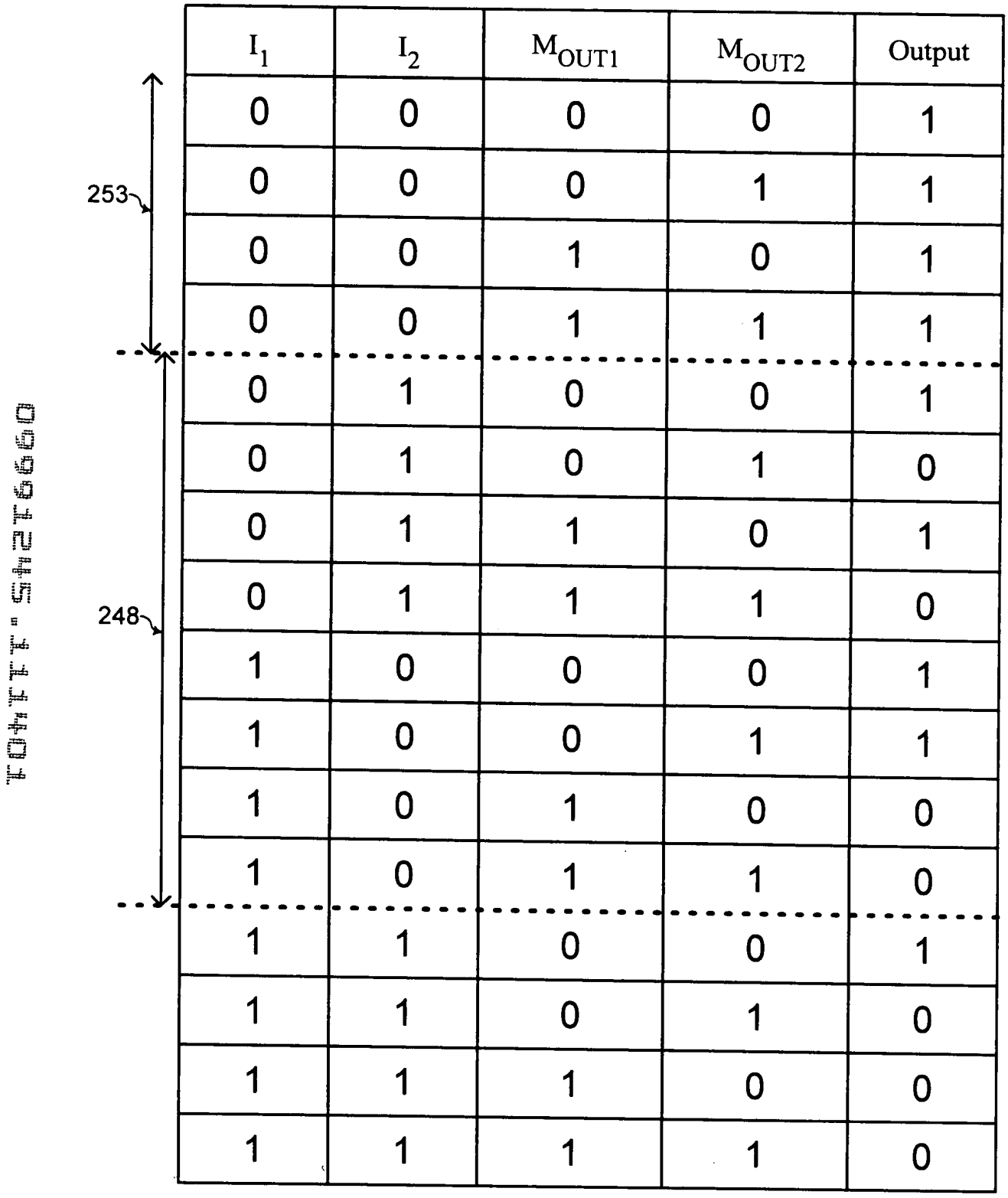

246
Memory Cell #2
228
V_{CC1}
V_{CC2}
M_{OUT2}
I_2
224
212
202
226
206
216
230
I_1
218
204
Output
220
208
232
210
222
234
V_{SS1}
V_{SS2}
M_{OUT1}
Memory Cell #1
214

FIG. 6



I_1	I_2	M_{OUT1}	M_{OUT2}	Output
0	0	0	0	1
0	0	0	1	1
0	0	1	0	1
0	0	1	1	1
0	1	0	0	1
0	1	0	1	0
0	1	1	0	1
0	1	1	1	0
1	0	0	0	1
1	0	0	1	1
1	0	1	0	0
1	0	1	1	0
1	1	0	0	1
1	1	0	1	0
1	1	1	0	0
1	1	1	1	0

FIG. 7

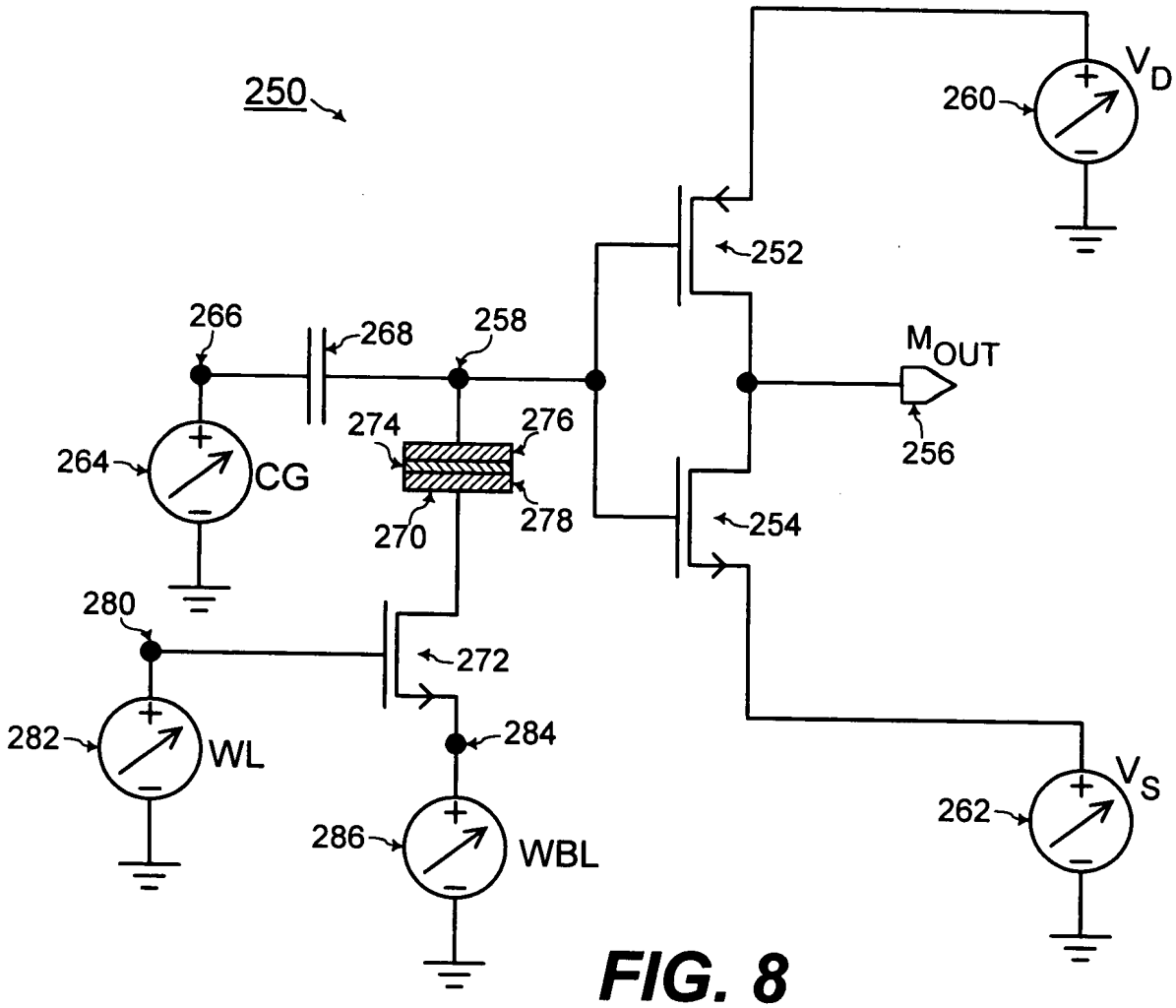


FIG. 8

Operation	CG	WL	WBL	V_D	V_S	M_{OUT}
Erase	V_{pp+}=12V	V_{dd}=1.8V	0V	V_{dd}=1.8V	V_{dd}=1.8V	V_{dd}=1.8V
Program	0V	V_{pp+}=12V	V_{pp}=11V	0V	0V	0V
Read	0.9V	V_{dd}=1.8V	0.9V	V_{dd}=1.8V	0V	V_{dd} or 0V

FIG. 9

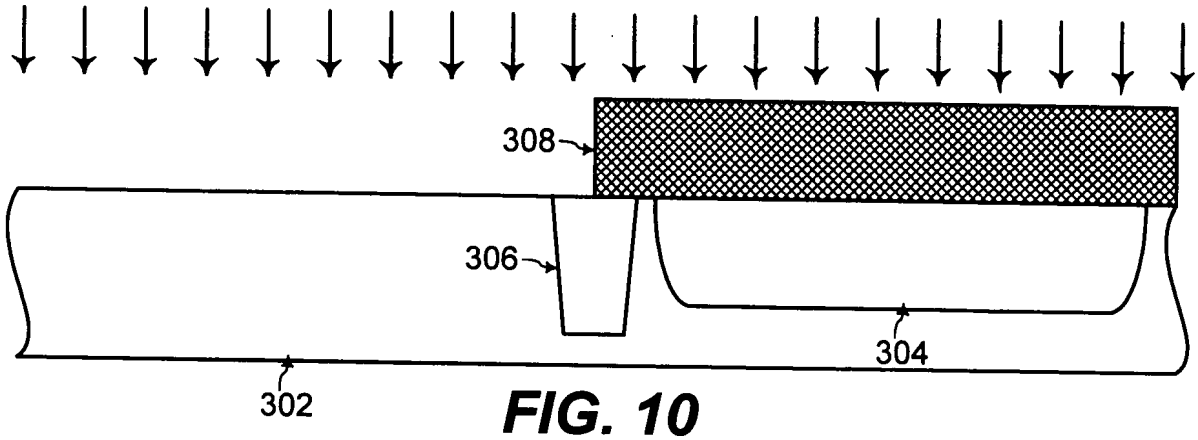


FIG. 10

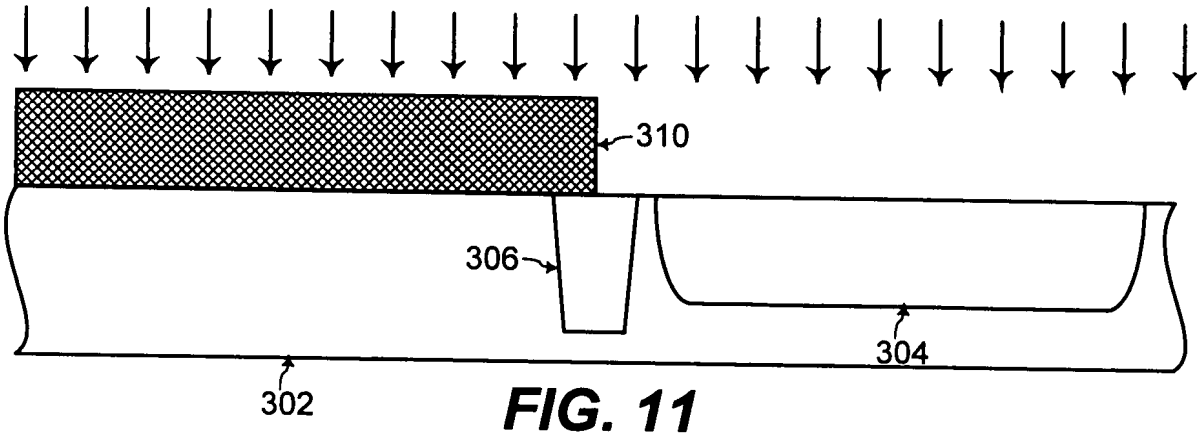


FIG. 11

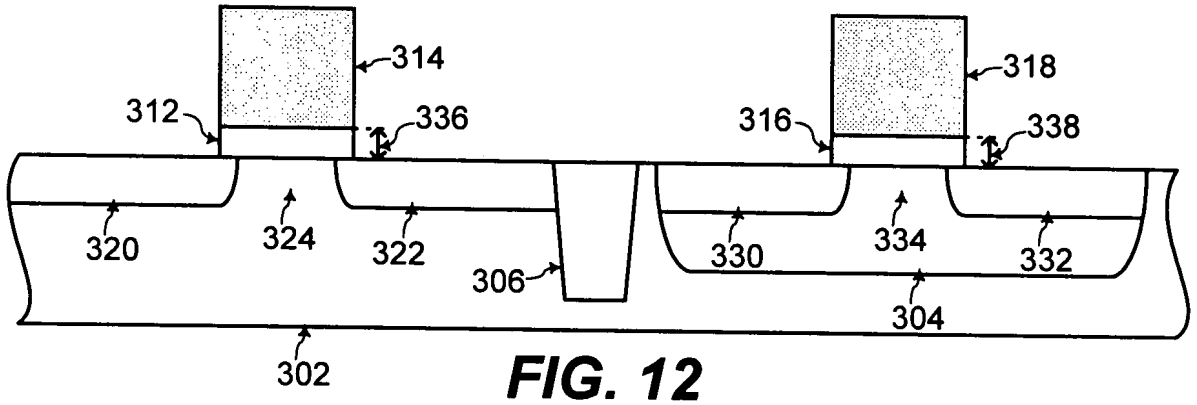


FIG. 12

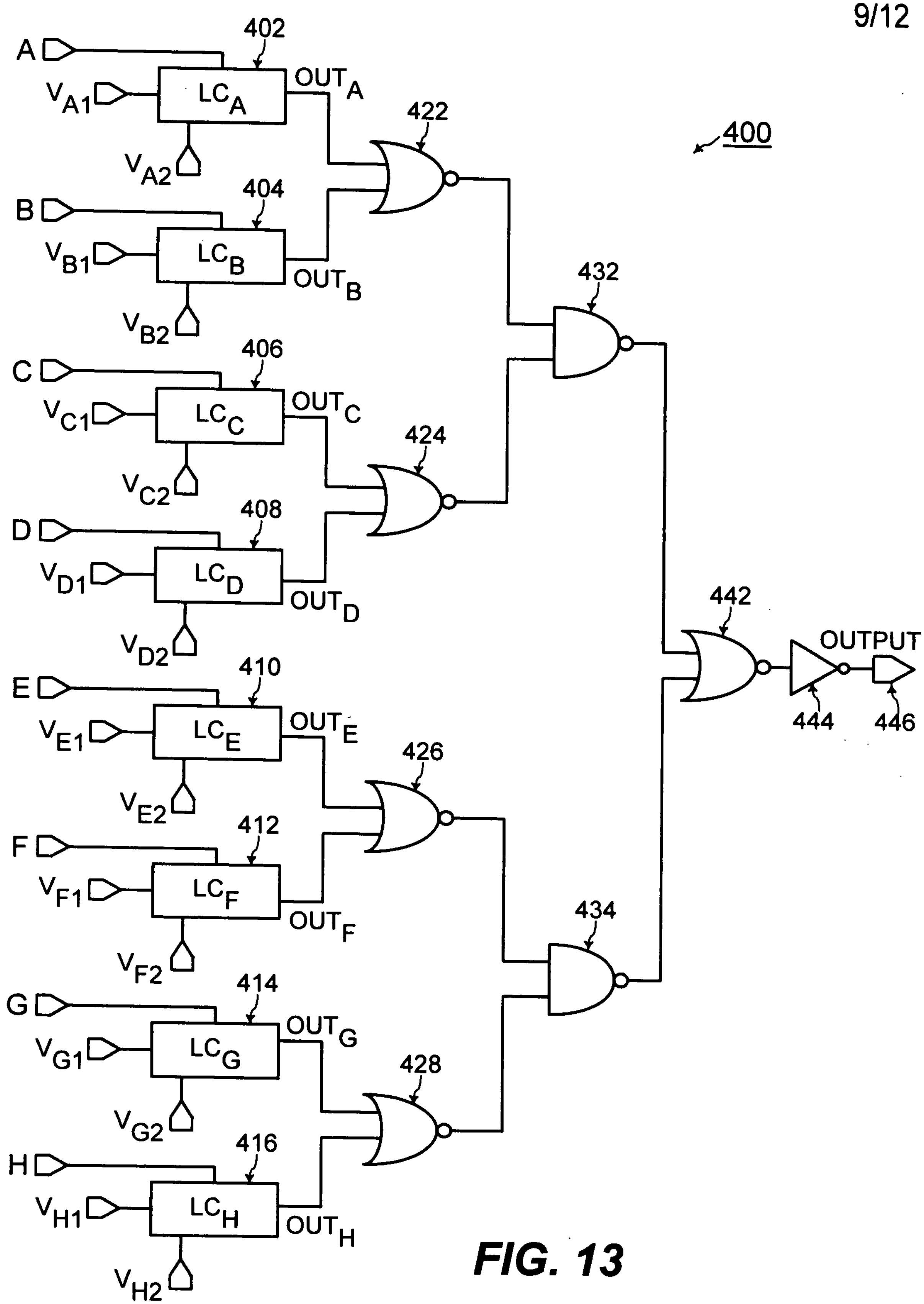

400
A
B
C
D
E
F
G
H
V_{A1}
V_{A2}
V_{B1}
V_{B2}
V_{C1}
V_{C2}
V_{D1}
V_{D2}
V_{E1}
V_{E2}
V_{F1}
V_{F2}
V_{G1}
V_{G2}
V_{H1}
V_{H2}
LC_A
LC_B
LC_C
LC_D
LC_E
LC_F
LC_G
LC_H
OUT_A
OUT_B
OUT_C
OUT_D
OUT_E
OUT_F
OUT_G
OUT_H
402
404
406
408
410
412
414
416
422
424
426
428
432
434
442
444
446
OUTPUT

FIG. 13

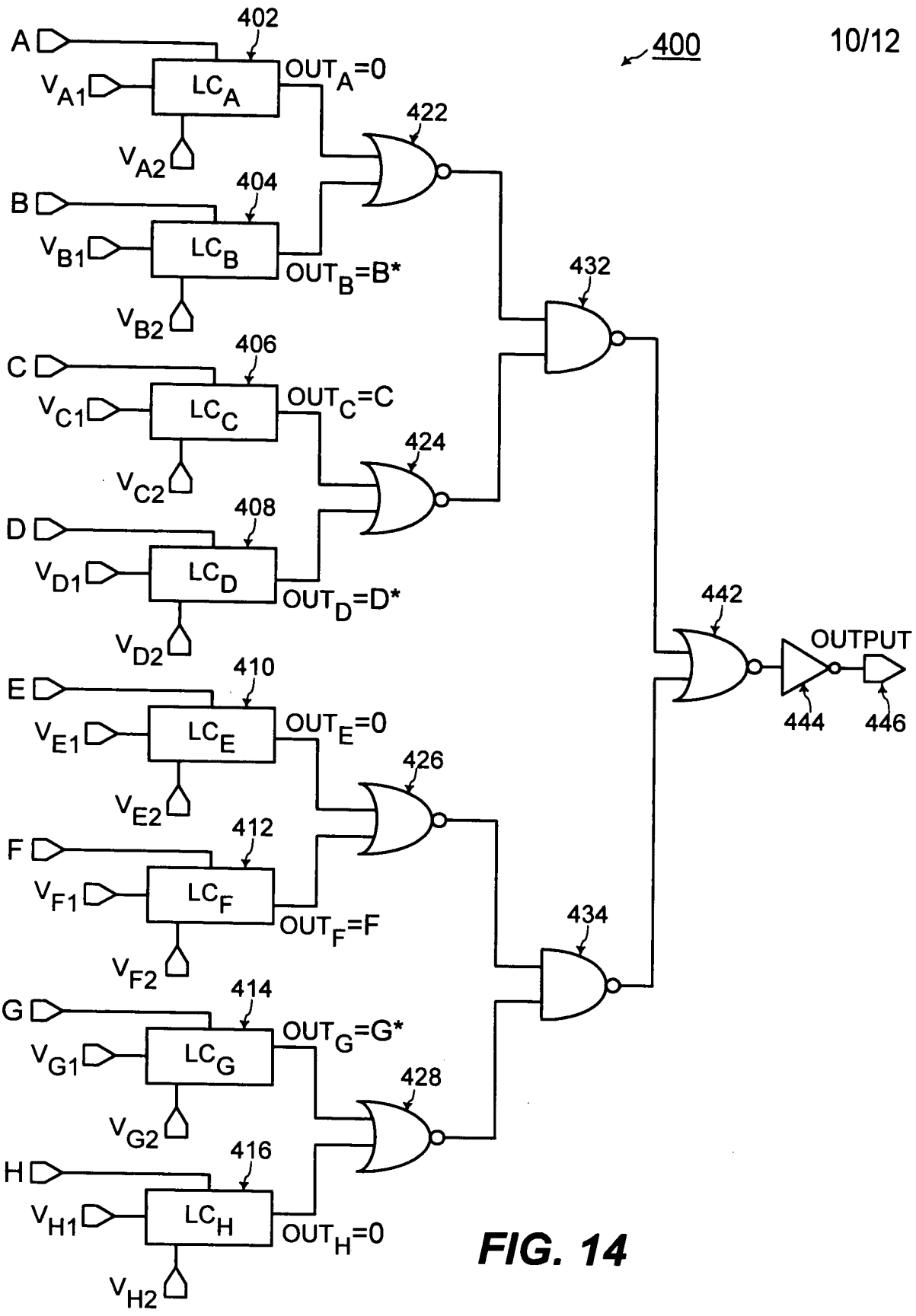

400
402
A
V_{A1}
LC_A
OUT_A=0
V_{A2}
422
404
B
V_{B1}
LC_B
OUT_B=B*
V_{B2}
432
406
C
V_{C1}
LC_C
OUT_C=C
V_{C2}
424
408
D
V_{D1}
LC_D
OUT_D=D*
V_{D2}
442
OUTPUT
444
446
410
E
V_{E1}
LC_E
OUT_E=0
V_{E2}
426
412
F
V_{F1}
LC_F
OUT_F=F
V_{F2}
434
414
G
V_{G1}
LC_G
OUT_G=G*
V_{G2}
428
416
H
V_{H1}
LC_H
OUT_H=0
V_{H2}

FIG. 14

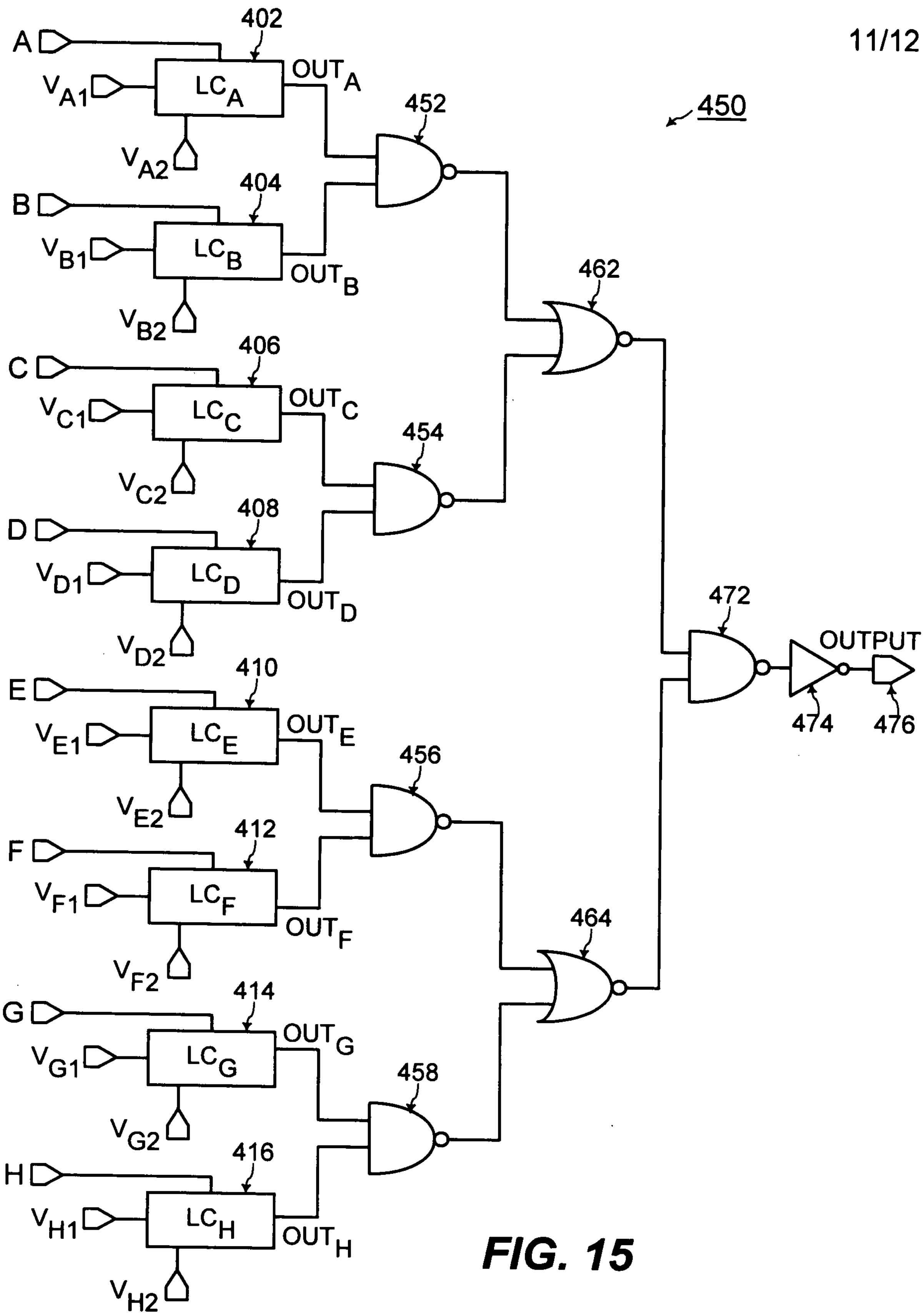

450
A
B
C
D
E
F
G
H
402
404
406
408
410
412
414
416
LC_A
LC_B
LC_C
LC_D
LC_E
LC_F
LC_G
LC_H
V_A1
V_A2
V_B1
V_B2
V_C1
V_C2
V_D1
V_D2
V_E1
V_E2
V_F1
V_F2
V_G1
V_G2
V_H1
V_H2
OUT_A
OUT_B
OUT_C
OUT_D
OUT_E
OUT_F
OUT_G
OUT_H
452
454
456
458
462
464
472
474
476
OUTPUT

FIG. 15

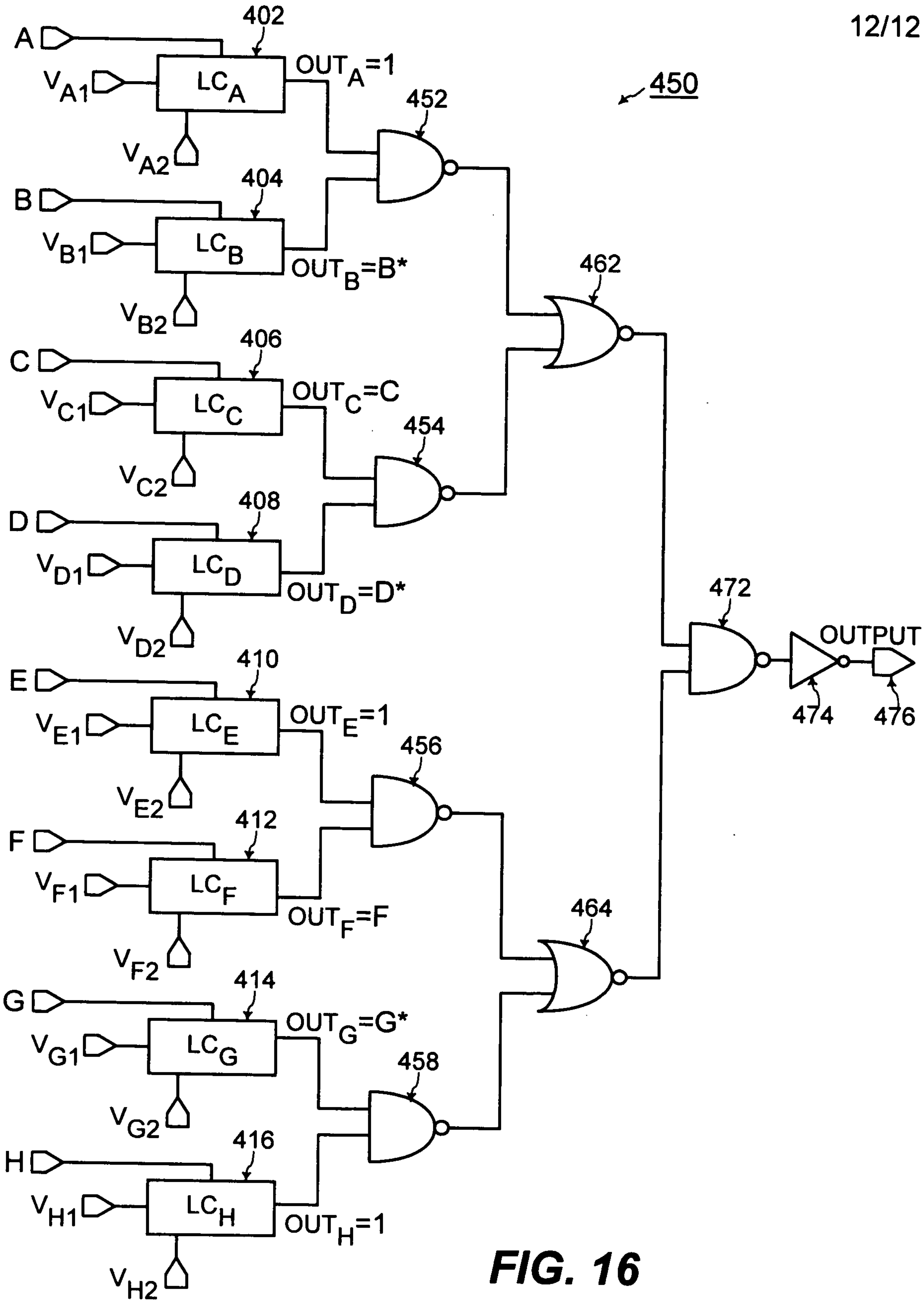

450
A
B
C
D
E
F
G
H
V_{A1}
V_{A2}
V_{B1}
V_{B2}
V_{C1}
V_{C2}
V_{D1}
V_{D2}
V_{E1}
V_{E2}
V_{F1}
V_{F2}
V_{G1}
V_{G2}
V_{H1}
V_{H2}
LC_A
LC_B
LC_C
LC_D
LC_E
LC_F
LC_G
LC_H
402
404
406
408
410
412
414
416
$OUT_A=1$
$OUT_B=B^*$
$OUT_C=C$
$OUT_D=D^*$
$OUT_E=1$
$OUT_F=F$
$OUT_G=G^*$
$OUT_H=1$
452
454
456
458
462
464
472
474
476
OUTPUT

FIG. 16